

axial directions together with RF, thus producing an MRSI. At preprocessing, a scout image is formed, an ROI is interactively set on the image, an RF modulating waveform is automatically generated by two-dimensional Fourier transformation of an ROI shape, and a measurement matrix for the smallest square covering the ROI is automatically generated. RF is modulated with the RF modulating waveform generated at preprocessing to measure an image matrix formed at preprocessing. Since unnecessary portions can be avoided precisely along its shape, and only necessary portions are excited, a metabolic substance image from which unnecessary signals are completely eliminated can be generated. Since a desired ROI is inputted interactively on a scout image, the ROI can be simply set. The measurement time is shortened by using a square measurement matrix.

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#### REMARKS

The specification has been amended to correct errors of a typographical and grammatical nature. Due to the excessive corrections thereto, applicants submit herewith a Substitute Specification, along with a marked-up copy of the original specification for the Examiner's convenience. Applicants submit that the Substitute Specification includes no new matter. Therefore, entry of the Substitute Specification is respectfully requested.

The abstract has been amended to correct errors of a grammatical nature. A copy of the marked-up abstract is also enclosed.

Also submitted herewith is a proposed amendment to the drawings, wherein Fig. 2 has been amended at this time. Upon receipt of the approval of the amendment to the drawings and receipt of a Notice of Allowance, the proposed drawing corrections will be effected in accordance with present practice.

Entry of the preliminary amendments and examination of the application is respectfully requested.

Please charge any shortage in the fees due in connection with the filing of this paper, to Deposit Account No. 01-2135 (529.41290X00) and please credit any excess fees to such deposit account.

Respectfully submitted,



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